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**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A subscriber station of a mobile communication system having at least one base transceiver station and a network control means, including an inter-frequency measurement means adapted to perform IF measurements, comprising:  
a time interval signal detection means adapted to detect in a transmission from said network control means an IF measurement time interval indication signal indicating a time interval of an established connection between said subscriber station and said base transceiver station in which IF measurements are to be carried out by said subscriber station, wherein said IF measurement means is adapted to perform said IF measurements in said time interval indicated in said IF measurement time interval indication signal.
2. (Currently Amended) A subscriber station according to claim 1, wherein said IF measurement means is adapted to carry out said IF measurements over the entire time interval indicated by the IF measurement time interval indication signal.
3. (Previously Presented) A subscriber station according to claim 1, wherein said IF measurement means is adapted to start performing said IF measurements in said time interval in response to an IF measurement trigger signal.
4. (Previously Presented) A subscriber station according to claim 3, wherein said IF measurement time interval indication signal is contained in said IF measurement trigger signal.

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5. (Previously Presented) A subscriber station according to claim 3, wherein said IF measurement trigger signal is generated by an IF handover means when said IF handover means determines that transmission conditions in said mobile communication system necessitate an IF handover of said subscriber station.

6. (Previously Presented) A subscriber station according to claim 3, wherein IF handover means is located in a network control means of said mobile communication system and is adapted to transmit said IF measurement trigger signal to said subscriber station via a base transceiver station in response to determining a network-evaluated handover.

7. (Previously Presented) A subscriber station according to claim 3, wherein IF handover means is located in said subscriber station and is adapted to output said IF measurement trigger signal in response to determining a mobile-evaluated handover.

8. (Previously Presented) A subscriber station according to claim 1, wherein said subscriber station comprises a connection quality monitoring means adapted to monitor the quality of service on the established communication connection and to transmit information of the quality of service to said network control means.

9. (Previously Presented) A subscriber station according to claim 1, wherein during said connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said subscriber station comprises a deletion means for deleting the data arriving from said base transceiver station during said time interval and a power adjustment means to increase a transmission power on the up-link on the communication connection before the beginning of said time interval and/or after the end of said time interval.

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10. (Previously Presented) A subscriber station according to claim 1, wherein during said connection a loss-sensitive and/or delay-sensitive data transmission is performed between said base transceiver station and said subscriber station.

11. (Previously Presented) A subscriber station according to claim 1, wherein a data transmission between said subscriber station and said base transceiver station is carried out via a transmission of data frames including a data portion and a control portion, wherein said data transmission between said subscriber station and said base transceiver station is carried out in a compressed mode by compression of transmission data in said data portion in at least one time slot such that an idle time interval is provided in said time slot where no data transmission occurs, wherein said subscriber station contains a compression-mode determining means for determining data transmission in said compressed mode and wherein said time interval corresponds to a number of data frames indicated in said IF measurement time interval indication signal and a number of idle time intervals of data frames where data transmission is carried in a compressed mode.

12. (Previously Presented) A subscriber station according to claim 1, wherein said IF measurement means also carries out measurements in an additional time interval where a data transmission takes place from said base transceiver station wherein said subscriber station contains a deletion means for deleting the data which arrives in said additional time interval.

13. (Previously Presented) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from

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said network control means to said subscriber station an IF measurement time interval indication signal indicating said time interval of said connection in which said IF measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal.

14. (Currently Amended) A method according to claim 13,  
wherein said IF measurements are carried out over the entire time interval  
indicated by the IF measurement time interval indication signal.

15. (Previously Presented) A method according to claim 13,  
wherein said IF measurements are performed in response to an IF measurement  
trigger signal.

16. (Previously Presented) A method according to claim 15,  
wherein said IF measurement time interval indication signal is sent in said IF  
measurement trigger signal.

17. (Previously Presented) A method according to claim 15,  
including the steps of determining wherein transmission conditions in said mobile  
communication system necessitate an IF handover of said subscriber station and  
generating said IF measurement trigger signal when it is determined that an IF handover  
is necessary.

18. (Previously Presented) A method according to claim 17,  
wherein said determining step whether transmission conditions in said mobile  
communication system necessitate an IF handover of said subscriber station is carried out

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by an IF handover request means located in a network control means of said mobile communication system and said IF measurement trigger signal is transmitted to said subscriber station via a base transceiver station in response to determining a network-evaluated handover.

19. (Previously Presented) A method according to claim 17,  
wherein said determining whether transmission conditions in said mobile communication system necessitate an IF handover of said subscriber station and said generation of said IF measurement trigger signal is carried out by an IF handover request means located in said subscriber station in response to determining a mobile-evaluated handover.

20. (Previously Presented) A method according to claim 13,  
wherein in said subscriber station the quality of service on an established communication connection is monitored and information of the quality of service is transmitted to said network control means.

21. (Previously Presented) A method according to claim 13,  
wherein in said base transceiver station the quality of service on an established communication connection is monitored and information of the quality of service is transmitted to said network control means.

22. (Previously Presented) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from said network control means to said subscriber station an IF measurement time interval

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indication signal indicating said time interval of said connection in which said IF measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal; and

wherein in said subscriber station the quality of service on an established communication connection is monitored and information of the quality of service is transmitted to said network control means; and

wherein said time interval of said communication connection is selected on the basis of said information on the quality of service, wherein said time interval is selected to be a time interval in which a temporary reduction of the quality of service due to said IF measurement means performing said IF measurements is allowed.

23. (Previously Presented) A method according to claim 20, wherein said time interval of said communication connection is selected on the basis of said information on the quality of service, wherein said time interval is selected to be a time interval in which a temporary reduction of the quality of service due to said IF measurement means performing said IF measurements is allowed.

24. (Previously Presented) A method according to claim 13,  
wherein during said connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein data arriving from said base transceiver station during said time interval is deleted and a transmission power on the down-link and the up-link on the communication connection before the beginning of said time interval and/or after the end of said time interval is increased.

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25. (Previously Presented) A method according to claim 13, wherein during said connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said transmission data before it is sent on the down-link of said communication connection is temporarily stored in a transmission buffer means having a predetermined size in said network control means, wherein in said time interval in which said IF measurements are carried out by said IF measurement means, said transmission buffer temporarily stores at least a portion of said transmission data to be sent during said time interval and said network control means sends said stored data to the subscriber station after said time interval has ended.

26. (Previously Presented) A method according to claim 13, wherein during said connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a transmission buffer means of a predetermined size for intermediate storage of said transmission data before it is sent on the down-link of said communication connection, wherein in said time interval in which said IF measurements are carried out by said IF measurement means, said network control means decreases the data transmission rate and increases the data transmission rate again after said time interval has ended.

27. (Previously Presented) A method according to claim 26, wherein if in the time interval the data amount to be transmitted is larger than the predetermined size of said buffer means, the network control means performs a re-scheduling with other buffer means to provide an increased storage capacity for the intermediate storage of transmission data.

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28. (Previously Presented) A method according to claim 26,  
wherein if in the time interval the data amount to be transmitted is larger than the predetermined size of the buffer means, said network control means is adapted to perform a dynamic buffer scheduling with other buffer means in order to increase the buffer size of said buffer means and decrease the buffer size of said other buffers means in the time interval.

29. (Previously Presented) A method according to claim 26,  
wherein if in the time interval the data amount to be transmitted is larger than the predetermined size of said buffer means, a deletion means of said network control means deletes at least a portion of the data to be transmitted in said time interval.

30. (Previously Presented) A method according to claim 29,  
wherein said IF handover request means comprises a transmission ratio determining means adapted to determine the ratio between transmitted and received data frames and the measurement time, said IF handover request means outputs said IF measurement trigger signal when said transmission/reception ratio is lower than a predetermined ratio.

31. (Previously Presented) A method according to claim 13,  
wherein a data transmission between said base transceiver stations and said subscriber station is carried out by transmitting data frames including a control portion and a data portion, wherein in a compressed mode of operation data in said data portion in at least one time slot of a data frame is compressed in said network control means such that an idle time interval is provided in said time slot where no data transmission occurs, wherein a data transmission in said compressed mode is detected in said subscriber station and wherein said time interval corresponds to a number of data frames indicated in said IF measurement time interval indication signal as well as a number of idle time



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intervals of data frames where data transmission is carried in a compressed mode.

32. (Previously Presented) A method according to claim 13,  
wherein said IF measurements are also carried out in an additional time interval  
where a data transmission takes place from said base transceiver station wherein the data  
which arrives in said additional time interval from said network control means is  
discarded in said subscriber station.

33. (Previously Presented) A mobile communication system including at least one  
subscriber station including an inter-frequency measurement means adapted to perform  
IF measurements, at least one base transceiver station, and a network control means for  
performing data transmissions with said subscriber station during a connection, wherein  
said network control means comprises an IF measurement time interval selecting means  
adapted to select a time interval of said connection in which said subscriber station is to  
carry out IF measurements and adapted to send to said subscriber station an IF  
measurement time interval indication signal indicating said time interval; and said  
subscriber station comprising a time interval signal detection means adapted to detect in a  
transmission from said network control means said IF measurement time interval  
indication signal indicating said time interval, wherein said IF measurement means is  
adapted to perform said IF measurements in said time interval indicated in said detected  
IF measurement time interval indication signal.

34. (Previously Presented) A system according to claim 33,  
wherein said IF measurement means is adapted to carry out said IF measurements  
over the entire time interval.

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35. (Previously Presented) A system according to claim 34,  
wherein said IF measurement means is adapted to perform said IF measurements  
in response to an IF measurement trigger signal.

36. (Previously Presented) A system according to claim 33,  
further including an IF handover request means adapted to determine whether  
transmission conditions in said mobile communication system necessitate an IF handover  
of said subscriber station and to generate said IF measurement trigger signal when it is  
determined that an IF handover is necessary.

37. (Previously Presented) A system according to claim 36,  
wherein said IF handover request means is located in said subscriber station and  
said IF measurement trigger signal is generated in response to determining a mobile-  
evaluated handover.

38. (Previously Presented) A system according to claim 33,  
wherein said subscriber station comprises a connection quality monitoring means  
adapted to monitor the quality of service on the established communication connection  
and to transmit information of the quality of service to said network control means.

39. (Previously Presented) A system according to claim 33,  
wherein said base transceiver station comprises a connection quality monitoring  
means adapted to monitor the quality of service on the established communication  
connection and to transmit information of the quality of service to said network control  
means.

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40. (Previously Presented) A system according to claim 38,  
wherein said IF measurement time interval selecting means selects said time interval of said communication connection on the basis of said information on the quality of service, wherein said time interval is selected to be a time interval in which a temporary reduction of the quality of service due to said IF measurement means performing said IF measurements is allowed.

41. (Previously Presented) A system according to claim 40,  
wherein during said communication connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said subscriber station comprises a deletion means for deleting the data arriving from said base transceiver station during said time interval and said network control means and said subscriber station each comprise a power adjustment means to respectively increase a transmission power on the down-link and the up-link on the communication connection before the beginning of said time interval and/or after the end of said time interval.

42. (Previously Presented) A system according to claim 33,  
wherein said loss-sensitive data transmission is a data transmission during a web-browsing.

43. (Previously Presented) A system according to claim 33,  
wherein a data transmission between said base transceiver stations and said subscriber station is carried out by transmitting data frames including a control portion and a data portion, wherein said network control means comprises a compressed mode operation means adapted to compress in a compressed mode of operation data in said data portion in at least one time slot of a data frame such that an idle time interval is provided in said time slot where no data transmission occurs, wherein said subscriber station comprises a compressed mode determining means for determining a data transmission in

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said compressed mode and wherein said time interval corresponds to a number of data frames indicated in said IF measurement time interval indication signal as well as a number of idle time portions of data frames where data transmission is carried in a compressed mode.

44. (Previously Presented) A network control means of a mobile communication system for controlling data transmissions between at least subscriber station and at least one base transceiver station on an established connection, comprising:

said network control means comprising an IF measurement time interval selecting means adapted to select a time interval of a connection in which said subscriber station is to carry out IF measurements and adapted to send to said subscriber station an IF measurement time interval indication signal indicating said time interval.

45. (Previously Presented) A network control means according to claim 44, wherein said network control means sends said IF measurement time interval indication signal together with an IF measurement trigger signal from said IF measurement time interval selecting means.

46. (Previously Presented) A network control means according to claim 45, including:

an IF handover request means adapted to determine whether transmission conditions in said mobile communication system necessitate an IF handover of said subscriber station and to generate said IF measurement trigger signal when it is determined that an IF handover is necessary.

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47. (Previously Presented) A network control means according to claim 44, wherein said IF measurement time interval selecting means selects said time interval of said communication connection on the basis of an information on the quality of service, wherein said time interval is selected to be a time interval in which a temporary reduction of the quality of service due to said IF measurement means performing said IF measurements is allowed.

48. (Previously Presented) A network control means according to claim 46, wherein during said communication connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a power adjustment means to respectively increase a transmission power on the down-link on the communication connection before the beginning of said time interval and/or after the end of said time interval.

49. (Previously Presented) A network control means according to claim 47, wherein during a communication connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a transmission buffer means of a predetermined size for intermediate storage of said transmission data before it is sent on the down-link of said communication connection, wherein in said time interval in which said IF measurements are carried out by said IF measurement means (IFMM), said transmission buffer temporarily stores at least a portion of said transmission data to be sent during said time interval and said network control means sends said stored data to the subscriber station after said time interval has ended.

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50. (Previously Presented) A network control means according to claim 47, wherein during a communication connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a transmission buffer means of a predetermined size for intermediate storage of said transmission data before it is sent on the down-link of said communication connection, wherein in said time interval in which said IF measurements are carried out by said IF measurement means, said network control means decreases the data transmission rate and increases the data transmission rate again after said time interval has ended.

51. (Previously Presented) A network control means according to claim 49, wherein, if in the time interval the data amount to be transmitted is larger than the predetermined size of said buffer means, the network control means is adapted to perform a re-scheduling with other buffer means to provide an increased storage capacity for the intermediate storage of transmission data.

52. (Previously Presented) A network control means according to claim 49, wherein, if in the time interval the data amount to be transmitted is larger than the predetermined size of the buffer means, said network control means is adapted to perform a dynamic buffer scheduling with other buffer means in order to increase the buffer size of said buffer means and decrease the buffer size of said other buffers means in the time interval.

53. (Previously Presented) A network control means according to claim 49, wherein, if in the time interval the data amount to be transmitted is larger than the predetermined size of said buffer means, a deletion means of said network control means deletes at least a portion of the data to be transmitted in said time interval.

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54. (Currently Amended) A network control means according to claim 46, wherein said IF handover request means comprises a transmission ratio determining means adapted to determine ~~the~~ a ratio between transmitted and received data frames and the measurement time, said IF handover request means outputs said IF measurement trigger signal when said transmission/reception ratio is lower than a predetermined ratio.

55. (Previously Presented) A mobile communication system comprising at least one base transceiver station, a network control means, and at least one subscriber station, the network control means comprising an IF measurement time interval selecting means adapted to select a time interval of a connection in which said at least one subscriber station is to carry out IF measurements and adapted to send to said at least one subscriber station an IF measurement time interval indication signal indicating said time interval;

the at least one subscriber station comprising an inter-frequency (IF) measurement means (IFMM) adapted to perform IF measurements and a time interval signal detection means adapted to detect in a transmission from said network control means the IF measurement time interval indication signal indicating the time interval of the connection between said at least one subscriber station and said base transceiver station in which IF measurements are to be carried out by said at least one subscriber station, wherein said IF measurement means is adapted to perform said IF measurements in said time interval indicated in said IF measurement time interval indication signal.

56. (Previously Presented) A subscriber station of a mobile communication system having at least one base transceiver station and a network control means, including an inter-frequency measurement means adapted to perform IF measurements, comprising:  
a time interval signal detection means adapted to detect in a transmission from said network control means an IF measurement time interval indication signal indicating a time interval of an established connection between said subscriber station and said base

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transceiver station in which IF measurements are to be carried out by said subscriber station, wherein said IF measurement means is adapted to perform said IF measurements in said time interval indicated in said IF measurement time interval indication signal; and wherein during said connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said subscriber station comprises a deletion means for deleting the data arriving from said base transceiver station during said time interval and a power adjustment means to increase a transmission power on the up-link on the communication connection before the beginning of said time interval and/or after the end of said time interval.

57. (Previously Presented) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from said network control means to said subscriber station an IF measurement time interval indication signal indicating said time interval of said connection in which said IF measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal; and

wherein during said connection a delay-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein data arriving from said base transceiver station during said time interval is deleted and a transmission power on the down-link and the up-link on the communication connection before the beginning of said time interval and/or after the end of said time interval is increased.



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58. (Previously Presented) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from said network control means to said subscriber station an IF measurement time interval indication signal indicating said time interval of said connection in which said IF measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal ; and

wherein during said connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said transmission data before it is sent on the down-link of said communication connection is temporarily stored in a transmission buffer means having a predetermined size in said network control means, wherein in said time interval in which said IF measurements are carried out by said IF measurement means, said transmission buffer temporarily stores at least a portion of said transmission data to be sent during said time interval and said network control means sends said stored data to the subscriber station after said time interval has ended.

59. (Previously Presented) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from said network control means to said subscriber station an IF measurement time interval indication signal indicating said time interval of said connection in which said IF

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measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal; and

wherein during said connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a transmission buffer means of a predetermined size for intermediate storage of said transmission data before it is sent on the down-link of said communication connection, wherein in said time interval in which said IF measurements are carried out by said IF measurement means, said network control means decreases the data transmission rate and increases the data transmission rate again after said time interval has ended.

60. (Currently Amended) A method for performing inter-frequency measurements in a subscriber station of a mobile communication system having at least one base transceiver station and a network control means, comprising the steps of selecting, during a connection between said subscriber station and said base transceiver station, an IF measurement time interval in a network control means and sending from said network control means to said subscriber station an IF measurement time interval indication signal indicating said time interval of said connection in which said IF measurements are to be carried out by said subscriber station; detecting said IF measurement time interval indication signal in said subscriber station; and performing said IF measurements in said subscriber station in said time interval of said connection as indicated by said IF measurement time interval indication signal; and

wherein during said connection a loss-sensitive data transmission is performed between said base transceiver station and said subscriber station, wherein said network control means comprises a transmission buffer means of a predetermined size for intermediate storage of said transmission data before it is sent on the down-link of said

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communication connection, wherein in said time interval in which said IF measurements are carried out by ~~said~~ IF measurement means (IFMM), said network control means decreases the data transmission rate and increases the data transmission rate again after said time interval has ended; and

wherein if in the time interval the data amount to be transmitted is larger than the predetermined size of said buffer means, a deletion means of said network control means deletes at least a portion of the data to be transmitted in said time interval; and

wherein ~~said~~ IF handover request means comprises a transmission ratio determining means adapted to determine the ratio between transmitted and received data frames and the measurement time, said IF handover request means outputs ~~said~~ an IF measurement trigger signal when said transmission/reception ratio is lower than a predetermined ratio.